

USN St. Julien's Creek Annex

Chesapeake, Virginia
Superfund Program Site Fact Sheet

Type of Facility: Naval Federal Facility

Funding: Department of Defense
Defense State Memorandum of Agreement

Lead Agency: United States Navy (USN)

Site Description and History

The St. Julien's Creek Annex (SJCA) is located in southeastern Virginia at the confluence of St. Julien's Creek and the Southern Branch of the Elizabeth River in the city of Chesapeake. The northern boundary of SJCA lies on the border between the cities of Portsmouth and Chesapeake, Virginia. The Elizabeth River and St. Julien's Creek form the eastern and southern boundaries, respectively, of SJCA. A residential section of Chesapeake City abuts SJCA on the west. Norfolk Naval Shipyard is located less than one mile to the north. St. Julien's Creek Annex occupies approximately 490 acres, including 407 acres of land, 14 acres of marsh, and 69 acres of surface water.

The St. Julien's Creek Annex began operations in 1849 as an ordnance and material storage facility. In 1898, the facility was equipped for assembling ammunition. From 1898 to 1970, the facility was used to supply ammunition to the fleet in addition to loading, assembling, issuing, and receiving naval gun ammunition, and conducting experimental and test loading for new ammunition.

In 1969, St. Julien's Creek was disestablished under U.S. Department of Defense and was consolidated as an annex to the Naval Weapons Station, Yorktown, Virginia. Ordnance operations at the facility were terminated in the 1970s.

In 1977, the annex was transferred to the Norfolk Naval Shipyard. In 1995, it was transferred to Naval Base, Norfolk, and then it was transferred to Naval Station, Norfolk, in 1996. St. Julien's Creek Annex currently provides administrative offices, light industrial shops, and storage facilities for tenant naval commands. Currently, its primary mission is to provide a radar testing range (35 acres) and various administrative and warehousing structures.

Threats and Contaminants

Former operations at the facility that generated potentially hazardous substances include metal plating, degreasing, painting, operation of hydraulic equipment, vehicle machine shops and locomotive maintenance shops, ordnance loading, ordnance testing, ordnance disassembly, ordnance destruction, pest control shops, electrical shops, boiler plant operations, potable water and salt water fire-protection systems, fire-fighter training, oil and chemical storage, maintenance of lead-acid batteries, and printing. Trash and garbage generated from the facility was disposed in on-site dumps. Wastes were typically disposed in

low areas, which are wetlands. Beginning in the late 1930s, waste ordnance materials were disposed on site. On-site disposal and storage of waste created numerous sources of potential contamination, including landfills and an ordnance disposal (burning) area. Sources of potential contamination located on the facility include four landfills, an ordnance disposal area, an ordnance burn pit, a hazardous waste disposal area, a waste storage area, and a pesticide disposal area. These sources were noted because of their potential to release to the surface water surrounding the facility, i.e., Blows Creek, St. Julien's Creek, and the Southern Branch of the Elizabeth River. The Southern Branch of the Elizabeth River provides habitat for numerous species that are identified as threatened or endangered under federal or state regulations. In addition, wetlands are present in several areas along the shoreline of SJCA. Both St. Julien's Creek and the Southern Branch of the Elizabeth River are used for recreational fishing.

Current Site Status

This site was proposed as an NPL site on February 4, 2000. The site was formally added to the list in the July 27, 2000, making it eligible for federal cleanup funds. A soil and background study was conducted in 2001. The objective was to establish background concentrations of metals, pesticides, and PAHs in surface and subsurface soil, and groundwater for use in the comparison of site data. Background levels are due to naturally occurring or anthropogenic sources. A Site Screening Assessment (SSA) was finalized in 2002. This SSA covered eight sites and 12 areas of concern. This SSA recommended further investigation at five of the sites/AOCs to determine if a release of contaminants have occurred. All sites identified to date have been investigated and cleaned up in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and given an NFA status with the exception of Sites 2, 4, 5, and 21.

Site 2 is a former waste disposal area that is currently in the Remedial Investigation/Feasibility Study (RI/FS) stage of the clean up process. The major contaminants of concern (CoCs) are chlorinated solvents in groundwater (TCE, DCE, VC) and DNAPL.

Site 4 is a former landfill. The remedial action consists of a landfill cover, land use controls, and annual visual soil cover and land use control inspections. The response is complete, voluntary groundwater monitoring is ongoing, and CERCLA 5-year reviews are required.

Site 5 is the former burning grounds previously used for decontamination of equipment. A Non-Time Critical Removal Action (NTCRA) of contaminated soil is planned and will be followed by completion of a proposed plan, and NFA Record of Decision (ROD). The major contaminants of concern are metals and pesticides in soil.

Site 21 is in an industrial section of SJCA where disposal of chlorinated solvents on ground surfaces occurred. This site is in the RI/FS stage investigating risks from CoCs in groundwater (TCE, DCE, VC), DNAPL, and possible vapor intrusion issues in site buildings.

Community Relations and Concerns

A federal facility may provide its own community relations program; however, it must be consistent with CERCLA, the National Contingency Plan, and the Environmental Protection Agency (EPA) policies. VDEQ staff members review and comment on documents such as

Community Relations Plans, fact sheets, slide shows, etc. They also participate in Restoration Advisory Board and public meetings, as requested, visit site locations, and provide additional community relations support, as needed.

VDEQ Representative	Information Repository
Karen Doran Remedial Project Manager Virginia Department of Environmental Quality PO Box 1105 Richmond, VA 23218 Phone (804) 698-4594 Fax (804) 698-4234 E-mail: kmdoran@deq.virginia.gov	Major Hillard Library 824 Old George Washington Highway, N. Chesapeake, Virginia 23323-2214